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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
GRIFFIN, WALTER DEAN	

ART UNIT	PAPER NUMBER
1764	

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/743,932	ABERNATHY ET AL.	
	Examiner	Art Unit	
	Walter D. Griffin	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *104 304 904 405*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 31-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 31-33 provide for the use of a lubricant, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 31-33 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by WO 02/064711.

The WO reference discloses a lubricant and method for manufacturing the lubricant. The lubricant is manufactured by obtaining a waxy, paraffinic Fischer-Tropsch product that contains less than 1 ppm of nitrogen and less than 5 ppm of sulfur, treating this product to remove any oxygenates, and hydroisomerizing (i.e., dewaxing) the product in the presence of a noble metal/intermediate pore size zeolite catalyst at temperatures ranging from 250° to 400°C to produce a base oil. The base oil is then blended with additives such as another base oil, PAO, and/or pour point depressants to form a lubricant. Because the lubricant of claim 30 is not further characterized, it has not been distinguished from the lubricant of the WO reference. See page 1, lines 1-8; page 2, line 25 through page 8, line 17; page 9, line 18 through page 10, line 25; page 11, lines 19-30; and page 12, line 24 through page 14, line 20.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/064711 in view of Miller (US 4,673,487).

The WO reference discloses a lubricant and method for manufacturing the lubricant. The method comprises obtaining a waxy, paraffinic Fischer-Tropsch product that contains less than 1 ppm of nitrogen and less than 5 ppm of sulfur, treating this product to remove any oxygenates, and hydroisomerizing the product in the presence of a noble metal/intermediate pore size zeolite catalyst at temperatures ranging from 250° to 400°C to produce a base oil. The resulting lube base oil comprises at least 99.9 wt% saturates. The amount of aromatics in the base oil would necessarily be at most 0.1 wt%. The saturates fraction in this base oil comprises between 10 and 40 wt% cycloparaffins. The weight ratio of 1-ring cycloparaffins relative to cycloparaffins having two or more rings is preferably greater than 5. The base oil is then blended with additives such as another base oil, PAO, and/or pour point depressants to form a lubricant. This lubricant

is not required to contain esters. Any VI improver present in the lubricant need not be present in an amount of greater than 8 wt%. Because of the similarities between the lubricant of the WO reference and the claimed lubricant, the lubricant of the WO reference is believed to meet the claimed requirements. The F-T product used as feed to the process has a weight ratio of compounds having at least 60 carbon atoms and compounds having at least 30 carbon atoms of at least 0.2. The T90 boiling point of the feed is within the range claimed. See page 1, lines 1-8; page 2, line 25 through page 8, line 17; page 9, line 18 through page 10, line 25; page 11, lines 19-30; and page 12, line 24 through page 14, line 20.

The WO reference does not disclose a process in which the hydroisomerized product is hydrofinished. The WO reference also does not disclose that the weight ratio of 1-ring cycloparaffins relative to cycloparaffins having two or more rings is greater than 15 and does not disclose that the feed to the process has a weight ratio of compounds having at least 60 carbon atoms and compounds having at least 30 carbon atoms of less than 0.18.

The Miller reference discloses that hydrofinishing stabilizes lubricating oils. See column 1, lines 10-17.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of the WO reference by including a hydrofinishing step as suggested by Miller because a more stable product will result.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of the WO reference by having a weight ratio of 1-ring cycloparaffins relative to cycloparaffins having two or more rings of greater than 15 in the base oil because the upper limit for this ratio as disclosed in the WO reference is close to the

lower claimed limit for this ratio. One would expect slight variances above the upper limit of the WO reference that would then fall within the claimed range to still result in an effective lube base oil because these slight variances would affect the characteristics of the final product only minimally.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of the WO reference by using a feed to the process that has a weight ratio of compounds having at least 60 carbon atoms and compounds having at least 30 carbon atoms of less than 0.18 because the lower limit for this ratio as disclosed in the WO reference is close to the upper claimed limit for this ratio. One would expect slight variances below the lower limit of the WO reference that would then fall within the claimed range to still result in the production of an effective lube base oil because these slight variances would affect the characteristics of the final product only minimally.

Claims 13-29 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/064711.

The WO reference discloses a lubricant and method for manufacturing the lubricant. The method comprises obtaining a waxy, paraffinic Fischer-Tropsch product that contains less than 1 ppm of nitrogen and less than 5 ppm of sulfur, treating this product to remove any oxygenates, and hydroisomerizing the product in the presence of a noble metal/intermediate pore size zeolite catalyst at temperatures ranging from 250° to 400°C to produce a base oil. The resulting lube base oil comprises at least 99.9 wt% saturates. The amount of aromatics in the base oil would necessarily be at most 0.1 wt%. The saturates fraction in this base oil comprises between 10 and 40 wt% cycloparaffins. The weight ratio of 1-ring cycloparaffins relative to cycloparaffins

having two or more rings is preferably greater than 5. The base oil is then blended with additives such as another base oil, PAO, and/or pour point depressants to form a lubricant. This lubricant is not required to contain esters. Any VI improver present in the lubricant need not be present in an amount of greater than 8 wt%. Because of the similarities between the lubricant of the WO reference and the claimed lubricant, the lubricant of the WO reference is believed to meet the claimed requirements. The F-T product used as feed to the process has a weight ratio of compounds having at least 60 carbon atoms and compounds having at least 30 carbon atoms of at least 0.2. The T90 boiling point of the feed is within the range claimed. See page 1, lines 1-8; page 2, line 25 through page 8, line 17; page 9, line 18 through page 10, line 25; page 11, lines 19-30; and page 12, line 24 through page 14, line 20.

The WO reference does not disclose that the weight ratio of 1-ring cycloparaffins relative to cycloparaffins having two or more rings is greater than 15.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of the WO reference by having a weight ratio of 1-ring cycloparaffins relative to cycloparaffins having two or more rings of greater than 15 in the base oil because the upper limit for this ratio as disclosed in the WO reference is close to the lower claimed limit for this ratio. One would expect slight variances above the upper limit of the WO reference that would then fall within the claimed range to still result in an effective lube base oil because these slight variances would affect the characteristics of the final product only minimally.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-30 of copending Application No. 10/744870. Although the conflicting claims are not identical, they are not patentably distinct from each other because each set of claims is drawn to a process for producing a lubricant in which an F-T product stream is dewaxed and hydrofinished to produce a lube base oil. The claims of 10/744870 do not include the step of blending the base oil with at least one lubricant additive. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the claims of 10/744870 by including the step of blending the base oil with at least one lubricant additive because blending such additives with the base oil will improve various properties of the base oil.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 13-30 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-34 of copending Application No. 10/744389. Although the conflicting claims are not identical, they are not patentably distinct from each other because each set of claims is drawn to a lube oil that has the same characteristics. The claims of 10/744389 do not include at least one lubricant additive in the composition. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the claims of 10/744389 by including at least one lubricant additive in the composition because blending such additives with the base oil will improve various properties of the base oil.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter D. Griffin whose telephone number is (571) 272-1447. The examiner can normally be reached on Monday-Friday 6:30 to 4:00 with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Walter D. Griffin
Primary Examiner
Art Unit 1764

WG
April 15, 2005